

seattle bicycle master plan ● ● ●

# Council Transportation Committee

## December 11, 2013



# Recommended Plan: Key Purposes

- Plan, design and develop a safe bicycling network that works for all
  - Citywide Network: all ages and abilities linking key destinations
  - Protected bike lanes (cycle tracks) on arterials
- Change the nature of the bicycle network to focus more on non-arterials
  - Dense, intra-neighborhood network (neighborhood greenways)
- Address multi-modal travel mode needs on arterials
  - Network development process
  - Project development process



# Public Review Draft BMP

- Draft Plan released June 5
- Extensive outreach:
  - Community meetings
  - Advisory boards
  - Commissions
  - District councils
  - Community councils
  - Businesses
  - On-line “Lunch and Learn”
  - On-line survey



# What SDOT Heard: Network Map



- NE Seattle (primarily NE 65<sup>th</sup> Street)

- Stone Way N



- West Seattle Cycle Tracks (protected bicycle lanes)



- Neighborhood Greenways

- Burke-Gilman Trail Missing Link



# What SDOT Heard: Other

- Need more emphasis on safety and education
- Provide implementation and funding details
- Develop a short-term implementation plan
- More focus on facility maintenance and upgrades
- Emphasize safety and connectivity in prioritization
- Need for additional staff and budget



# Recommended Plan: Major Changes



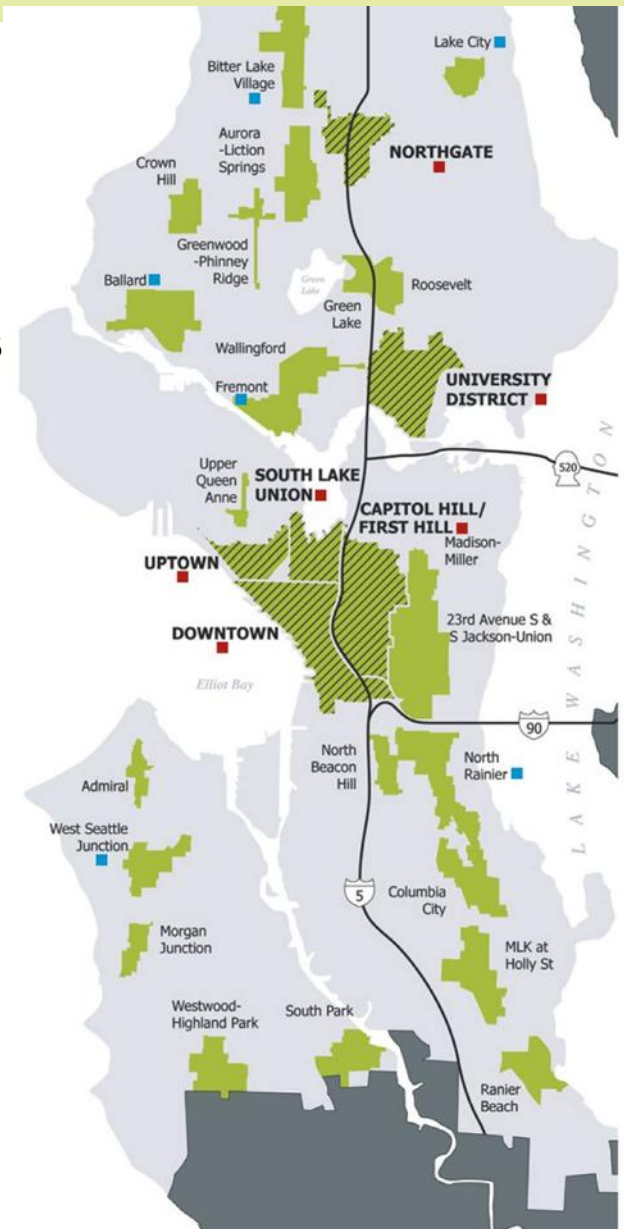
- New Executive Summary
- Updated bicycle network map
- More emphasis on safety throughout document
- New consolidated implementation chapter
  - Implementation strategies and actions
  - Project development and delivery process
  - Prioritization framework
  - Maintenance and upgrades of existing facilities
  - Funding strategy and planning-level cost estimates
  - Updated performance measures





# Growth Management

- Substantial growth expected over 20 years
  - 70,000 households
  - 115,000 jobs
- Comprehensive Plan guides growth by 4 core values
  - Community
  - Environmental Stewardship
  - Economic Opportunity and Security
  - Social Equity
- Direction to provide more opportunities to walk, bike, and use transit is contained in:
  - Transportation Element
  - Complete Streets Policy
  - Climate Action Plan



# More Bicyclists = Safer Streets for Everyone

## Safety is SDOT's top priority

- Main rationale for the type of facilities recommended in the plan (neighborhood greenways, protected bike lanes)

## Research shows:

- Policies that increase the number of people walking and biking are effective in improving safety for all roadway users
- Slower motor vehicle speeds increase survival rates for both pedestrians and bicyclists involved in collisions





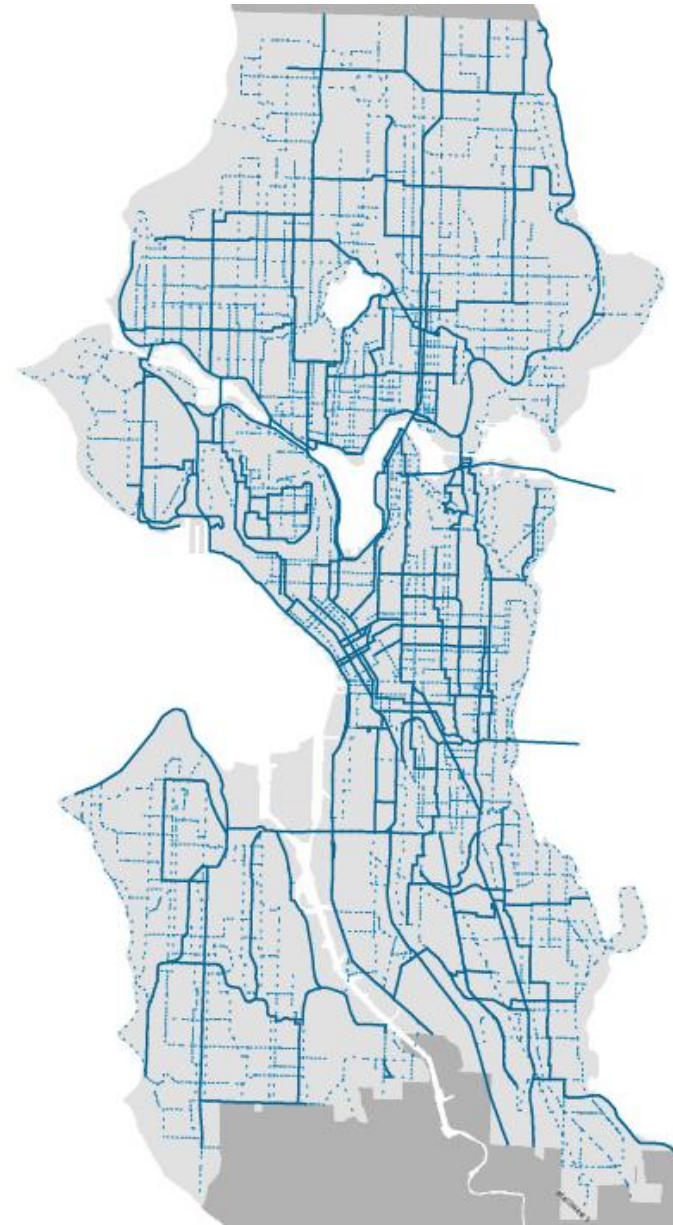
# Bicycle Network Map

## Citywide Network:

- “All ages and abilities” facilities that connect to local destinations
- Multi-use trails, protected bicycle lanes, and neighborhood greenways

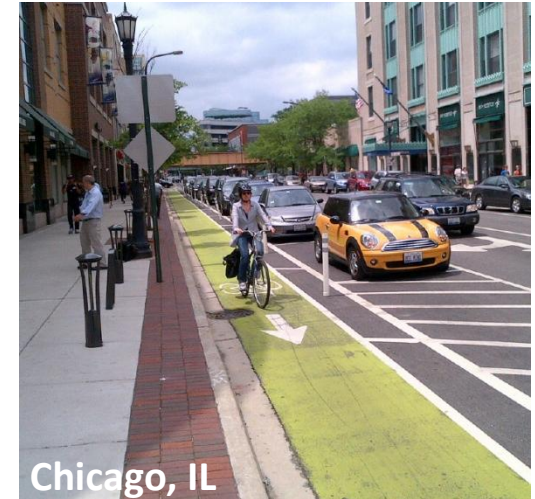
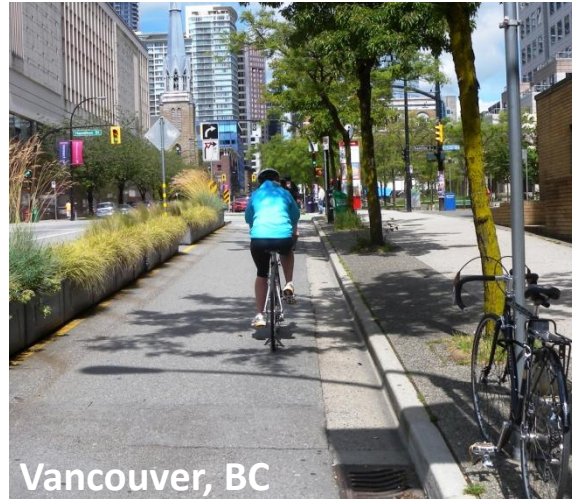
## Local Connectors:

- Facilities that connect to the citywide network and serve local destinations
- Multi-use trails, protected bicycle lanes, neighborhood greenways, bike lanes, buffered bike lanes, shared lanes



# Cycle Tracks (Protected Bicycle Lanes)

Cycle tracks provide separation between bike riders and other vehicle traffic, and can be designed in a variety of ways





# Neighborhood Greenways

Residential streets that are optimized for pedestrians and bicycles—a major component of the plan

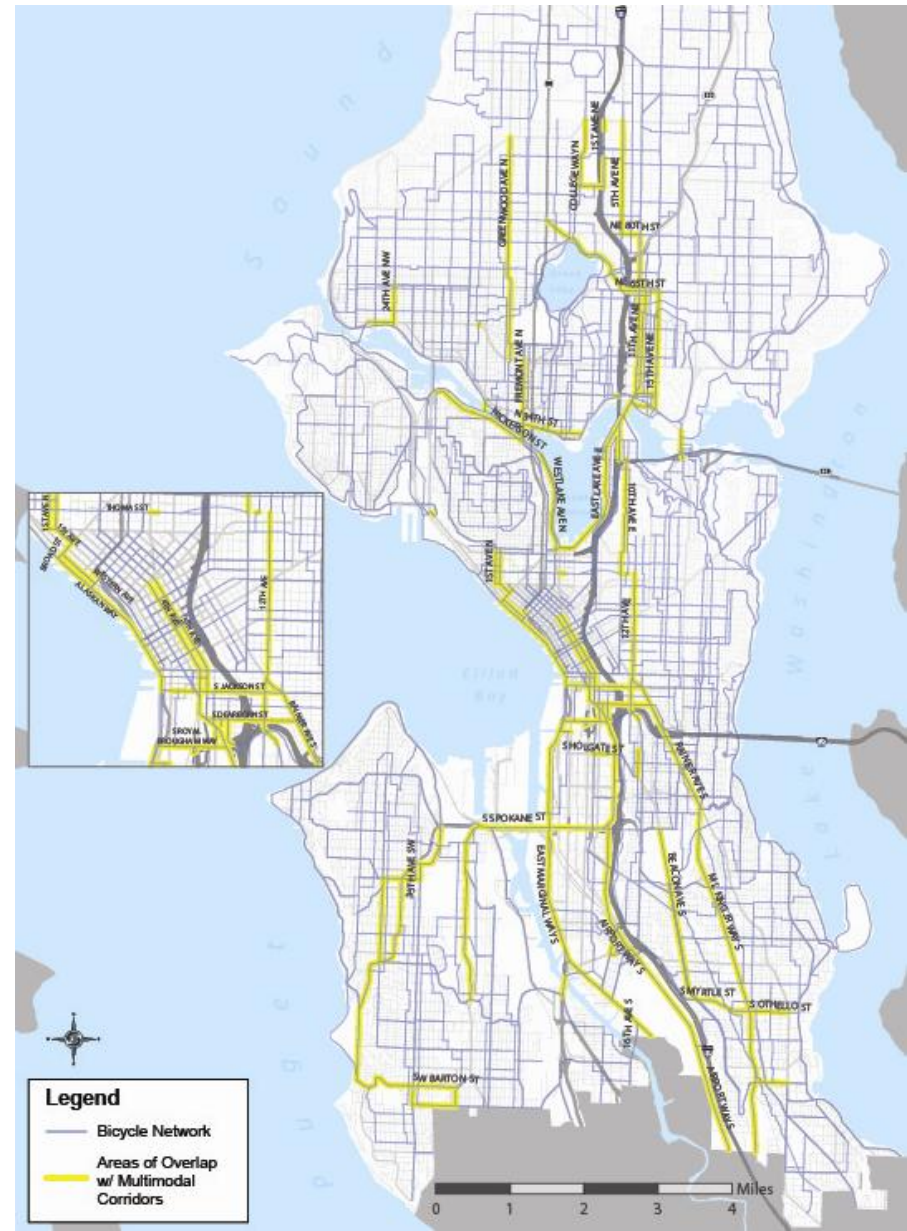


Treatments include:

- Pavement markings and wayfinding signs
- Traffic calming elements – speed humps, traffic circles
- Safety improvements at crossings and intersections

# Multimodal Corridors

- Multimodal corridors are where a proposed bicycle facility is on the same street as:
  - Priority transit corridors
  - Major Truck Streets
  - Pedestrian corridors
- Plan includes a multimodal corridor decision making process





# Bicycle Network Facilities

Bicycle Facilities in the Recommended Bicycle Network (lengths in miles)

	Existing Network*	Proposed Network Improvements			Total Network	Percent of Total Network
		Upgraded to Existing Bicycle Facilities	New Facilities	Total New or Upgraded Facilities to Build		
Off Street	46.9	0	32.0	32.0	78.9	13%
Cycle Track (protected bicycle lane)	3.2	52.1	49.5	101.6	104.8	17%
Neighborhood Greenway	10.3	0	238.6	238.6	248.9	41%
In Street, Minor Separation	44.4	17.9	75.6	93.5	137.9	23%
Shared Street	30.0	0	7.8	7.8	37.8	6%
<b>Total</b>	<b>134.8</b>	<b>70.0</b>	<b>403.5</b>	<b>473.5</b>	<b>608.3</b>	<b>100%</b>

\*Existing network totals include only existing facilities that meet the bicycle network facility designation guidelines or, in some cases, where right-of-way is limited and a higher-quality facility could not be implemented.



# End-of-Trip Facilities

BMP includes strategies to improve bicycle parking:

- Seattle Municipal Code changes
- Parking demand in the public ROW
  - Bicycle racks
  - On-street bicycle corrals
- Showers/changing facilities
- Bicycle parking at transit stations
- Temporary (event) bicycle parking
- Abandoned bicycles and locks



On-street bicycle corral



Secure Bicycle Parking



Bike Racks and Lockers

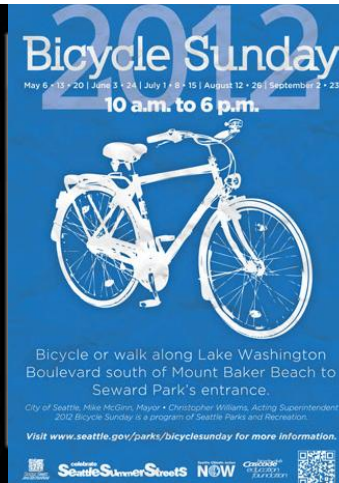




# Programs

The BMP includes strategies to develop and improve:

- Bicycle safety
- Wayfinding and trip-planning
- Access to and encouragement for bicycling
- Economic and community development



# Implementation Approach

## New Implementation Chapter

- Implementation strategies and actions
- Prioritization process
- Bicycle project delivery process
- Coordination with other city departments and partners
- Maintenance of and improvements to bicycle facilities
- Funding strategy
- Performance measurements



# Planning-Level Cost Estimates

- Broad cost estimates of recommended bicycle network ranges from \$390,000,000 to \$524,000,000
- Range of costs based on different assumptions about needed improvements, contingency costs, etc.

	Total Plan Miles	Facilities to Build (miles)	Approximate Cost per Mile (low end)	Facility Cost (low end)	Approximate Cost per Mile (high end)	Facility Cost (high end)
Off Street	78.9	32.0	\$1,456,000	\$46,590,000	\$1,573,000	\$50,340,000
Cycle Track	104.8	101.6	\$1,546,000	\$157,070,000	\$1,894,000	\$192,430,000
Neighborhood Greenway	248.9	238.6	\$659,000	\$156,240,000	\$952,000	\$226,150,000
In Street, Minor Separation	137.9	93.5	\$321,000	\$30,010,000	\$574,000	\$53,670,000
Shared Street	37.8	7.8	\$48,000	\$370,000	\$48,000	\$370,000
Total	608.3	473.5		\$391,280,000		\$523,960,000



# Prioritization Framework

## Framework to prioritize bicycle improvements:

- Complete high demand segments of the Citywide Network
  - Center City and Downtown protected bike lanes
  - Neighborhood greenways
- Quantitative evaluation based on five plan goals:
  - Safety (Highest weight)
  - Connectivity
  - Equity
  - Ridership
  - Livability
- Qualitative evaluation (leveraging other funding opportunities, community interest, geographic balance)



# Moving Forward After Plan Adoption



Next steps on implementing the Bicycle Master Plan would include:

- Develop a 3-5 year implementation plan (Strategy 7.16)
- Prioritize projects on an annual basis
- Project development process
  - More detailed analysis of all bicycle projects needed as part of implementation
  - Apply multi-modal corridor decision framework
  - Public engagement for all projects





# Review the Plan

Recommended plan is available at:

<http://www.seattle.gov/transportation/bikemaster.htm>

